"R care-Mental healthcare using mobile application"

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ABSTRACT— There has been increasing interest in theuseofsmartphoneapplications(apps)andotherconsumer technology in mental health care for a numberofyears.However,thevisionofdatafromappsseamlesslyreturnedto,andintegratedin,theelectronicmedicalrecord(EMR)toassistbothpsychiatristsandpatientshasnot been widely achieved, due in part to complex issuesinvolved in the use of smartphone and other consumertechnology in psychiatry. These issues include consumertechnology usage, clinical utility, commercialization, andevolving consumer technology. Technological, legal andcommercialissues,aswellasmedicalissues,willdetermine the role of consumer technology in psychiatryand hence there is need of such applications that are abletodiagnosetheuserontherealtimeandgiveanalternative solution and in this case the application to bea mental healthcare companion for the user To help theusertocopeupwithhis/hermentalhealthTomakeauserfriendly environment for the user to interact and shareRecord the mood graph of the user and give him/her tipsandsuitablevideosaccordingtocurrentmoodofthe userKeep the track of users mood in form of a journal and alsoanalyses the current mood of the user and make a recordof it Gives a proper information and alternatives to the user

Keywords—healthcare, applications, technology, smartphone

I.   INTRODUCTION

In recent years, there has been increasing clinical andresearch interest in the potential applications   for healthappsacrossarangeofphysicalandmentalhealthconditions.Addingimpetustothisisagrowinginformalevidencebasesuggestingwidespreadattemptsby consumers to at least try out health apps. In a 2018international consumer survey of adults, approximatelyhalfofrespondentsreportedhavingusedahealthapp,athreefoldincreasesince2014.Ourideaoftheprojectistocreateaninteractiveappforthepeoplewhoneedhelpto cope up with mental health. App will record theperson'smoodandsuggestsomegoodexercisetoper form. It will have a graph type record of the user.Apphasajournalthatusercanuseforwriting.Italso providessometipsandvideostoimprovethemoodofthe userandbeaperfect mental healthcarecompanion.
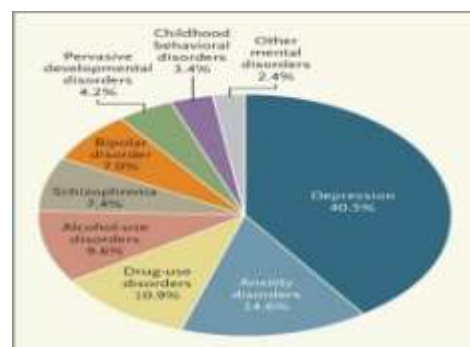

Fig,1: Pie chart on survey

So, in the following chart we complied the data thathow many percent of people are affected by some kindof mental health issues in the following year and it'snot a minor problem that should be ignored and itshouldwe given proper attention

II. PROBLEM DEFINITION

As we know coping up with mental health can be difficult despite the stigma, especially in these stressful times. They face a problem that they don't know where to start learning about improving their mental health and seeking professional help is also difficult for being expensive and inaccessible due to family views as well. We aim to aid in making a safe space for people in need of a secure environment to share and be able to keep a track of their mood and also having some alternative ways to improve his/her mental health.

III. MOTIVATION

Mobile apps hold promises for serving as a lifestyleintervention in public health to promote wellness andattenuate chronic conditions, yet little is known abouthow individuals with chronic illness use or perceivemobile apps and there has been a lot of mental healthproblemsthesedaysbecauseofthecurrentpandemic situation so it has been a need of such application thatwillanalyzeandcopeupwithone'smentalhealththere are many apps applications available but they are notmuchaccurateorfeasiblefortheusersandhencewearelookingforwardtofilloutthosegapsandmake amuchmore better app to help the people who needs a mentalhealthsupport.

IV. LITERATURE SURVEY

After looking into many research papers and websitesrelated tothis wefoundout

1. Afterreviewingsomeresearchpapers,wegottoknowthattherearemanyapplicationsavailablebut they are all not accurate and not interactivewhichmakes themalmostuseless

2. The loop holes found were the app availabledoesn't look like an App that would help userstocopeupwithone'smentalhealthafterdoing analysis on the following applicationit wasfoundout5outofevery10usersdidn'tusetheapplication or uninstalled it right away as theyfelt itwasnoteffective

3. Insuchcaseourprojectisofferingusersajournal with a notification and keeps the trackoftheuser'smoodandshowshimtipsandvideos to help him/her to cope up with theirmood

4. Also, in other applications it was difficult forthem to keep a track or record in the moodswingsoftheuserandweareplanningonimplementing a mood graph for the users inputtoovercomethefollowingproblem

5. Inotherappstheinstructionstousetheappwasnotcl earandhencetheuserdoesn'tusetheappwhereare weareplanningtomaketheappuserfriendlysoit'sf easibleto use
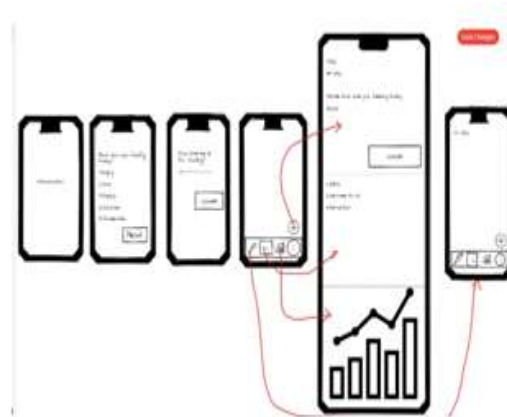
V. PROPOSED DESIGN

Fig. 2: UI design of the project

So this is the base of the project we have thought so farwe thought of an interactive app and interface where theuser will be notified and asked how his or her mood isat that time and keep a track of it, in the beginning wewill have a small intro for the app to display it featuresso it will be more convenient for the user so the basestructures includes of a homepage that leads to ajournal in with the user has to input the data to like ananalysis of their mental health without them knowingso the idea used in this method is that the user has towrite and interact with the app to tell how his/her dayhas been going after that the user will be asked abouthow they are doing and also maps a graph based on theuser mood showing elevation and deviation in thegraph also the second option will help user to cope upwith the following mood for example if the user isdiagnosedinsad/depressedmoodsomecheerfulstuff or a secondary tip or article to see if the user is really having the mood he/she had input and finally there will be a notification system to keep user interacted as well as not force user to record the mood.

VI. RESULT & DISCUSSIONS

The analysis of the literature demonstrated thatmindful meditation was most applied in mental healthintervention programs using mobile apps. Otherintervention programs included cognitive behavioraltherapy apps, complex programs made up of a varietyof different components, and apps based on the stressmodel and breathing exercises. Mental health appsencouraged awarenessofself

andprovidedinformation pertaining to the user's current status, andwere comprised of components such as music,meditation, breath work, quotes, videos, nature sounds,and health information. Such apps reduced stress,anxiety, and depression and improved well-being, butfacedchallengesinthat therewereonlya smallnumber of intervention studies, making thegeneralizationofthestudyfindingsdifficult.Theym ay be helpful in the development and application ofmobile apps for adults as it's not very feasible forsomeone to go to a doctor or psychiatrist as the mobileapplication would provide a self-diagnosis feature andan alternative measure to deal/cope up with thefollowingproblem.

VII.   SCOPE OF PROJECT

Increasedunderstandingofthecomplexissue ssurroundingconsumertechnologiesisneededtosucce ssfullyintegrateappsintothepracticeofpsychiatry.
New methodologies must be defined andstandardized to evaluate the efficacy of apps used
forscreeningortreatment.Regardlessofthetechnology platform,onlysomepatientswillusetheapp.Giventher ealities of app accuracy, efficacy, privacy, security,andtheregulatoryenvironment,andtomaximi zeparticipation, a variety of technology platforms shouldbeusedfordatacollectionratherthanfocusingon smartphones.Developmentshouldalsoincludeadmini strativeappsthatmayincreasecareparticipation,andap psthateducateaboutmentalillness.Appdevelopmentr equiresmultidisciplinaryexpertise in medical, legal, consumer, and technicalareas, with physicians and patients heavily involved inall phases, and large-scale testing in clinical settings.Therefore, the need of apps in the medical field will beamustastheusercandoaself-diagnosisandbeassuredaboutthechangestheyarefacin g.

VIII.   CONCLUSION

If the Mental Healthcare application prove to beeffective as hypothesized, this will provide collateralevidence of their efficacy. It could also provide thebenefits of:-Improved access to mental health servicesfor people in rural areas, lower socioeconomic groups,and children and adolescents. Improved capacity toenhanceface-to-facetherapythroughdigitalhomework tasks that can be shared instantly with atherapist. It is also anticipated that this methodologycould be used for other mental health apps to bolsterthe independent evidence base for this mode oftreatment. Smartphone apps offer the potential for safeand effective treatment across a range of mental healthconditions. However due consideration is required ofthe included therapeutic approaches (and how theycomplement care), clinical safety of app content, dataprivacy and security, likely ongoing engagement withthe app, and how digital tools will integrate withexisting ways of working. Importantly, any tool eventhose harnessing the most recent developments such assensors is likely much more impactful if used inconjunctionwithongoingcare,ratherthanreplacingi t.. Technology is well-poised to transform how mentalhealth treatment is delivered and accessed, but thistransformation requires the combined mobilization ofscience,regulation, and design.

IX.   REFERENCES

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